NEWS RELEASE

USDA FOREST SERVICE • FOREST PRODUCTS LABORATORY
One Gifford Pinchot Drive • Madison, WI 53726-2398 • www.fpl.fs.fed.us

FOR IMMEDIATE RELEASE September 28, 2011

NR # 20110928

Contact: Sue Paulson, (608) 231-9249

E-mail: skpaulson@fs.fed.us

FPL Research Supports USDA's $80 Million Biofuels Investment

U.S. Department of Agriculture Secretary Tom Vilsack this morning announced that Washington State University and University of Washington each will receive a five-year, $40 million grant to help develop alternatives to petroleum-based fuels and chemicals. As a partner in the Washington State University-led Northwest Advanced Renewables Alliance (NARA), the U.S. Forest Service Forest Products Laboratory (FPL) will receive $1.1 million to pretreat woody biomass for conversion to aviation fuel.

"This is an opportunity to create thousands of new jobs and drive economic development in rural communities across America by building the framework for a competitively priced, American-made biofuels industry," Vilsack said. "Public-private partnerships like these will drive our nation to develop a national biofuels economy that continues to help us grow and out-compete the rest of the world while moving our nation toward a clean-energy economy."

NARA includes a broad consortium of scientists from universities, government laboratories and private industry. The WSU-led grant aims to address the urgent national need for a domestic biofuel alternative for U.S. commercial and military air fleets. NARA researchers envision developing a new, viable, aviation fuel industry using wood and wood waste. The project also will focus on increasing the profitability of wood-based fuels through development of high-value, bio-based co-products to replace petrochemicals that are used in products such as plastics.

FPL research engineer JunYong Zhu will demonstrate his patent-pending technique, SPORL (Sulfite Pretreatment to Overcome Recalcitrance of Lignocellulose) in the NARA program. Zhu has successfully used SPORL on lodgepole pine woody biomass (juvenile wood with a high lignin content), but his contribution to NARA will be using SPORL on biomass of another softwood, Douglas-fir, grown by Weyerhaeuser.

SPORL was developed on the basis of sulfite pulping technology, which has been carried out at a large commercial scale for decades. By making use of existing equipment, processes, and knowledge of the pulp and paper industry, SPORL presents fewer technical barriers to building new plants or to retrofitting existing pulp mills to production of biofuels. The process also reduces energy requirements and will address feedstock variability of bark, needles, and branches. This pretreatment process is an integral part of converting woody biomass to aviation fuel. The pretreated materials will be sent to Weyerhaeuser and Gevo for conversion to renewable chemicals and advanced biofuels, respectively.

NARA includes Gevo, Greenwood Resources, Catchlight Energy (a joint venture of Chevron and Weyerhaeuser) and Weyerhaeuser from private industry, along with WSU, Montana State University, the National Center for Genome Resources, Oregon State University, Pennsylvania State University, Salish-Kootenai College, University of Idaho, University of

Minnesota, University of Montana and UW, the U.S. Forest Service, including the Pacific Northwest Research Station and the Forest Products Laboratory, and the William D. Ruckelshaus Center, which is jointly operated by WSU and UW.

For over 100 years, FPL's work with academia, industry, and other government agencies has led to ground-breaking discoveries with great benefit to the public. Additional information on FPL's research is available at www.fpl.fs.fed.us.

# # #